

**UNITED STATES DEPARTMENT OF COMMERCE****United States Patent and Trademark Office**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/612,598 07/07/00 FARBER

D PM 270531

000909
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TM02/0905

EXAMINER

GECKIL.M

ART UNIT

PAPER NUMBER

2152

DATE MAILED:

09/05/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/612,598

Applicant(s)

FARBER ET AL.

Examiner

Mehmet Geckil

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/20/01, 4/26/01, and 5/2/01.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 41, 42, 45 and 48-69 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 41, 42, 45 and 48-69 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 21.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

1. Claims 41,42,45 and 48-68 are presented for examination.

2. Previous examiner who was in charge of this application is leaving the Office.

This application is now reassigned to this Primary Examiner. Examiner reviewed the case carefully in order to prepare himself to deal with the issues of the case.

Preliminarily examiner noted that the previous examiner was in the process of preparing Interference process. Examiner while reading the claims discovered some claim dependency and other 112 second paragraph problems. Later, examiner checked the supplied Appendix I for accuracy and found several contradictory errors in the Appendix I, e.g. see Appendix I, page 15 and page 17. On page 15, applicant identified the support for the first level name server at the browser and with respect to first level name server including a "network map" feature of claim 45 (which depends on claim 41) applicant pointed out to the page 20 lines 4-7 for support and quoted the following phrase, "The BRS relies on three pre-computed tables, namely the Group Reduction Table, the Link cost Table, and the Load table. These three tables (described below) are computed off-line and downloaded to each reflector by its contact in the repeater network" So applicant is saying that this quoted section provides support for the network map as claimed in claim 45 but claim 45 states the following, "wherein the first level name server includes a network map" and above quoted section which points to the page 20 states that the network map is at the reflector and thus there is no proper support for the network map at the browser and thus raising substantial 112 first

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paragraph enablement questions. It would be improper to proceed with the interference process in view of these issues. In order to clarify the record on these issues, the examiner is reopening prosecution on the merits so that applicant may properly respond to and address these issues.

3. Claims 49,50,52, and 57-59, 62-63, and 67-68 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are indefinite because the following claim language is not clear:

a) claim 52 line 1 recites that claim 52 depends on claim 49 but claim 52 recites several ARL phrases which are not in claim 49. ARL phrases are in claim 51.

Obviously claim 52 should depend on claim 51;

b) The following phrase "the server" in claim 52 lacks clear antecedent basis. This claim corresponds to the claim 18 of the U.S. Patent 6,108,703 ("703" patent from now on.) In claim 18 of the "703" patent this phrase corresponds to "the content server."

Applicant should resolve this issue accordingly;

c) The following phrase "...rewriting the embedded object URL as the modifies the page" in claim 59 does not make any sense because it is an incomplete sentence.

Examiner compared this claim to the originally filed claims and found out that the phrase used to read, "...rewriting the embedded object URL as the content provider modifies the page." Probably during the preparation of the amendment some error occurred in

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copying and pasting and thus the essential element "content provider" was left out of the claim 59 and thus made the claim 59 unintelligible;

d) "...the second domain" in claim 62 lacks clear antecedent basis; and

e) "...the content provider server" in claim 67 lacks clear antecedent basis.

4. Applicant filed a paper requesting for interference in accordance with 37 CFR 1.607.

Examiner does not believe that there is interference in this case at this time. The "703" Patent has substantially different architecture than the present application. There is no support in the present application for the substantially copied claims. Therefore, there is substantial 112 first paragraph problems in this application. Lastly, both the "703" patent and the invention described in this specification accomplish similar results, e.g., they modify the URL addresses so that these addresses will resolve to other computers but they do this by different architecture and with different means. Examiner will elaborate on this point with respect to 112 first paragraph rejection.

5. The following is a quotation of the CFR § 1.71:

a) The specification must include a written description of the invention or discovery and of the manner and process of making and using the same, and is required to be in such full, clear, concise, and exact terms as to enable any person skilled in the art or science

to which the invention or discovery appertains, or with which it is most nearly connected, to make and use the same.

The specification is objected to under CFR § 1.71, as failing to provide an adequate written description of the invention and failing to adequately teach how to make and use the invention, i.e. failing to provide an enabling disclosure.

Preliminarily, applicant did not teach details of the first level name server including a network map as claimed in claim 45. On page 15 of Appendix I, applicant identified the support for the first level name server at the browser and with respect to first level name server including a "network map" feature of claim 45 (which depends on claim 41) applicant pointed out to the page 20 lines 4-7 for support and quoted the following phrase, "The BRS relies on three pre-computed tables, namely the Group Reduction Table, the Link cost Table, and the Load table. These three tables (described below) are computed off-line and downloaded to each reflector by its contact in the repeater network" So applicant is saying that this quoted section provides support for the network map as claimed in claim 45 but claim 45 states the following, "wherein the first level name server includes a network map" and above quoted section which points to the page 20 states that the network map is at the reflector and thus there is no proper support for the network map at the browser. It would take undue experimentation for one of ordinary skill in the networking art at the time of the invention to figure out the details of the first level nameserver including a network map as claimed in claim 45.

Also, applicant did not teach details of the first level name server and second level name server as claim in claim 41, e.g., "...embedded object URL is served from a given one of theidentified by the first level and second level name servers." The key limitation in this claim is "as identified by the first and second level name servers." Applicant's system does this identification differently from the system of the "703" patent. In "703" patent first and second name servers are located in different hierarchy and perform different functions and they communicate with each other (see column 9 line 33 et seq and column 10 line 1 et seq.) For example, first level or top level DNS is different from regular DNS servers in that first level DNS servers include appropriate control routines that are used to determine where in the network a user is located (see column 9 line 33 et seq of "703" patent.) Conversely, applicant in Appendix I page 15 pointed to the page 11 lines 13-15 and Appendix I page 16 pointed to the page 17, line 27 to page 18 line 3 where the browser uses the regular DNS to lookup the network address of the corresponding server. In "703" architecture, their inventors modified the regular DNS code to put control routines that are used to determine where in the network a user is located. Alternately, in applicant's invention this feature of determining where the user is located in the network is done not in the DNS but by the reflector mechanism (see applicant's specification, column 3 line 2 et seq.) Another difference between the "703" patent and the present applicant's invention is the way the best repeater is selected. In "703" patent, the top level (first level) DNS which has the modified code determines (see "703" patent, column 10 line 12 et seq) where in the network the request originated and redirects the request to a low level DNS which is

close to the user (see the difference, low level DNS which is close to the user) and this

low level DNS selects the best repeater (see "703" patent, column 10 lines 54-61.)

This is completely different from the applicant's invention described in the application.

Thus, there was no reasonable justification to copy the claims from the "703" patent.

It would have been obvious to one of ordinary skill in the networking art at the time of

the invention that the system described and claimed in "703" patent is different than the

system described in the applicant's specification as demonstrated hereinabove and

copied claims do not have proper support in the applicant's specification. Therefore, it

would take further undue experimentations for one of ordinary skill in the networking art

at the time of the invention to figure out the details of the how the first level and second

level name servers identify the embedded object URL which is served from a given one

of the repeater servers.

Moreover, with respect to support for the limitations recited in claim 48 last 2 lines, e.g., "if the cached copy of the embedded object is not available from the server, serving the embedded object from the first server." applicant in the Appendix I, page 20 pointed out to the page 19 lines 2-8 and quoted the following, "if a resource is not cached locally, the cache can query its 'peer caches' to see if one of them contains the resources, before or at the same time as requesting the resource from the reflector/origin server." This phrase contradicts what is in the claim 48 last two lines. Namely, the server requested the object from the reflector because it was not available in its cache locally. Now, if the reflector doesn't have the object in its cache it is not

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clear how can the reflector can request the object from the server because the server did not have it originally. Even, let's assume the reflector gets it from the origin server and serves it, this is contradictory to the claim limitation because claim limitation states that it is served by the first server or origin server. So there is no support in the specification, according to the Appendix I, for serving the object from the origin server or first server because it is served from the repeater server as just explained hereinabove. Also, the specification at page 3 lines 17-23 states that if the repeater does not have a local copy of the request, it forwards the requested to the origin server to get the resource, and saves a local copy of the resource in order to serve subsequent request. This is contrary to the limitation in the claim because claim 48 last line states that if the cached copy of the embedded object is not available from the server, serving the embedded object from the server. Thus, it would take further and further undue experimentations for one of ordinary skill in the networking art at the time of the invention to figure out the details of how the object is served by the first server or origin server if a local copy did not exist in the repeater server. Because applicant's specification lacks support for this feature.

Claims 52,55-56, 60-61, and 63 users location and current Internet traffic conditions but there is no support in the specification for the "current Internet traffic condition" language. For example, applicant, with respect to claim 52, in the Appendix I, page 23 52/18 pointed out to the page 16 lines 11-14. This section does not say anything about claimed current Internet traffic conditions. That section appears to be addressing local area networks and whether to reflect or not and it has nothing to do

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with the claimed current Internet traffic condition language. Thus, it would take further and further undue experimentations for one of ordinary skill in the networking art at the time of the invention to figure out the details of the claimed current Internet traffic conditions feature.

Moreover, other broader claims would not function as claimed because the underlying DNS structure is different and thus there is no support for them as explained above and they depend on the DNSs for properly functioning.

The examiner contends that it would require repeated undue experimentations for one of ordinary skill in the networking art to make and use the claimed invention for the reasons set forth hereinabove. Applicant is reminded that no new matter is allowed in the amendment to the specification under 35 U.S.C. 132 and 37 CFR 1.118(a).

As it is demonstrated from the above examples, the specification lacks the proper support for the copied claims as pointed out in the conflicting and erroneous information in the Appendix I as well as lack of support in the specification. Appendix I supposed to show the proper support for the copied claims in order to justify an interference request. Appendix I fails to provide the necessary support for the copied claims and thus there is no justification for the interference process at this point.

6. Claims 41, 42, 45, 48-68 are rejected under 35 U.S.C. § 112, first paragraph, for the reasons set forth in the objection to the specification.

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7. Claims 41,42,48-51,53-54,57-59,62,64-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graber et al.

Graber et al (5,712,979) taught the invention substantially as claimed including a distributed hosting framework operative in a computer network in which users of client machines or user stations connect to first server (col 11 line 61 et seq, e.g., 122a), the framework comprising:

a) a routine for modifying at least one embedded object URL or link of a web page to include a hostname prepended to a domain name and path (col 10 lines 57-68 and col 11 line 30 et seq);

b) a second server, e.g. OLS site, distinct from the first server, e.g. 122a, for hosting some of the embedded objects of web pages (cols 10-11);

c) wherein in response to requests for the web page, generated by the client machines, the web page including the modified embedded object URL is served from the first server (col 12 line 35 et seq and col 13 line 1 et seq) and the embedded object identified by the modified embedded object URL is served from a given one of the second servers (e.g. see column 12 lines 65-67, and col 13 line 9 et seq, e.g. external links appended.)

8. It would have been obvious to one of ordinary skill in the networking art at the time of the invention that the claimed invention differed from the teachings of Graber et al only by a degree, e.g. in the wording of a set of repeater servers but from a broad interpretation of the claims, even taught Grabber et al did not say that OLS servers were

repeater servers, examiner interprets them as equivalent to the repeater servers because they store some of the web pages and serve them to the user. The heart of the invention, e.g., modifying embedded object URLs and inserting the modified embedded object URLs into the web page and then returning this page to the user so that these embedded objects or links can be fetched from the destinations servers where the modified embedded URL points to are all taught by Grabber et al (see for example column 13 line 9 et seq for external URL links being appended and col 14 line 2 et seq for the destination page which includes the URLs having the appended codes being passed to the user and the user executing or fetching these links by clicking on the links which is no more than a difference in scope.) The first and second level DNS are not mentioned by Grabber et al but these are all inherent features of the Internet networks because all addresses are resolved by the DNS in the Internet paradigm. Applicant also in the supplied appendix stated this argument (see Appendix I page 16 right column top section. Other features are all obvious variations of the well known features of the Internet art. Examiner is taking this position with respect to first and second level DNSs or name servers because the way applicant approached to these first and second level DNSs. Even though the first and second level DNS code were modified from the regular DNS code and had different modified functionality in "703" patent, applicant totally ignored these and stated that first and second level DNSs were well known in the art in the Appendix I. So examiner is applying the same logic back to the applicant and saying that using first and second level DNSs were well known in the art for resolving addresses to IP numbers of destinations in lieu of the applicant's

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admission of well known DNS features. Moreover, even though Grabber et al did not mention about using fault tolerance, e.g. buddy server (claim 42) or replication or the like., these are well known features of the computer art for decades. Every system manager's first duty is to set up a backup system for recovery from the system disasters. Applicant's replication is an obvious variations of the well known features of the networking art, e.g. for example caching requested copies in local cache stores is taught for a long time in the Internet, e.g. Squid caching is well known. Moreover, as to claims which recites using markup languages or tags, these features are inherent features of the www and Grabber et al taught using markup languages and tags see table II. As to claims reciting redirecting from one domain to another domain, Grabber et al system exactly did that, e.g. ,see figure 1 element 122a or first server is a domain www.cm1.com and element 128 or the second server is also another domain www.ols.com and the first domain redirected requests to the second domain as explained hereinabove.

9. Claims 45, 52,55,56, 60,61, and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graber et al in view of Bonnaure et al.

Graber et al teachings are incorporated by reference as set forth hereinabove. Serving the requested pages from servers close to the user is known in the art as network geographical data, .e.g., see Bonnaure et al (5,862,339), column 12-13, especially column 12 lines 39-68 and column 13 lines 1-34. Network geographical data comprises the network map as claimed in claim 45. It would have been obvious to one of ordinary

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skill in the networking art at the time of the invention to combine the teachings of Graber et al and Bonnaure et al to provide increased performance based networking system based on the user's location information.

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

11. Claims 51, 57-59, 62, 64, and 67-68 are rejected under 35 U.S.C. 102 (e) as being clearly anticipated by Grabber et al (5,812,769).

12. Grabber et al taught the invention as claimed including all the claimed limitations (see figures 1 and 5-6, and columns 5, and 11-12. Grabber et al system modified and appended the URL links into the requested page and sent the page with the appended links so that the user will select one of the embedded or appended object URL to fetch the desired object from the destination server identified by the link URL (see column 12 line 45 et seq. Claims do not recite any automatically fetching of the embedded objects pointed by the appended URL. Thus, in the Grabber et al system user selects the modified appended URL link by clicking on the link and the embedded object is resolved and the object is received from the identified destination server. This operation

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of the Grabber et al system reads on these claims because of the broad recitation of the claim language.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mehmet Geckil whose telephone number is (703) 305-9676. The examiner can normally be reached on Monday through Friday from 6:30 A.M. to 3:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Mark Rinehart, can be reached on (703) 305-4815. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-9731.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 305-9731, or (703) 746-7238 (for After final communications;

Or:

(703) 305-9731, or (703) 746-7239 (for formal communications intended for entry)

Or:

(703) 305-9731 or (703) 746-7240 (for status inquiry or informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington, VA., Fourth Floor (Receptionist).

9/4/01

MEHMET B. GECKIL
PRIMARY EXAMINER

